

UTAH RADIATION CONTROL BOARD

MINUTES OF THE UTAH RADIATION CONTROL BOARD MEETING, September 6, 2002, Department of Environmental Quality (Bldg. #2), Conf. Room 101, 168 North 1950 West, Salt Lake City, Utah.

BOARD MEMBERS PRESENT

Stephen T. Nelson, Ph.D., Chairman
William J. Sinclair, M.S.E.H., Executive Secretary
Kent J. Bradford, P.G.
Thomas K. Chism, M.S.
Rod O. Julander, Ph.D.
Linda M. Kruse, M.S.
Karen S. Langley, M.S.
Dianne R. Nielson, Ph.D., Executive Dir. of DEQ
Gregory G. Oman, D.D.S., B.S.
John W. Thomson, M.D.
Gene D. White, Commissioner

BOARD MEMBERS ABSENT/EXCUSED

Gary L. Edwards, M.S., Vice Chairman

DRC STAFF/OTHER DEQ MEMBERS PRESENT

Clark Clements, DRC Staff
Jule Fausto, DRC Staff
Dane Finerfrock, DRC Staff
Boyd Imai, DRC Staff
Craig Jones, DRC Staff
Laura Lockhart, Utah Attorney General's Office
Chris Morley, Utah Attorney General's Office
Loren Morton, DRC Staff
Fred Nelson, Utah Attorney General's Office
Yoli Shropshire, DRC Staff

PUBLIC

Kenneth L. Alkema, Envirocare of Utah, Inc.
Gregory H. Copeland, Greenfield Logistics
Steve Erickson, Citizen's Education Project
Jason Groenewold, FAIR
Mark Ledoux, Envirocare of Utah, Inc.
Patrick Malone, LLGM, LLP

Cindy King, Utah Chapter, Sierra Club
Jim Holtkamp, LeBoeuf, Lamb, Greene & MaCrae LLP (LLGM, LLP)
Charles Judd
Mitchell Rehmann, IUC (USA)
Ty Rogers, Envirocare of Utah, Inc.

**Anne Sward Hansen, Citizens Against
Radioactive Waste**

GREETINGS/MEETING CALLED TO ORDER

The Utah Radiation Control Board convened in the DEQ Building #2, Room 101, 168 North 1950 West, in Salt Lake City, Utah. The meeting was called to order at 2:05 p.m. by Dr. Stephen T. Nelson, Chairman of the Board. Dr. Nelson welcomed all members and public attending the meeting. Dr. Nelson stated to those present, if they wished to address any items on the agenda to indicate it on the sheet as they signed in. Those desiring to comment would be given a chance to address their concerns on the agenda items to the Board.

Dr. Nelson welcomed the newest Board Member, Commissioner Gene D. White. Commissioner White introduced himself to those in attendance at the Board meeting.

1. APPROVAL OF MINUTES (Board action items)

a. Approval of July 12, 2002 Minutes

Stephen Nelson asked Board members for any corrections to the minutes of July 12, 2002. The following Board Members had corrections to the minutes:

Karen Langley, proposed the following changes to the minutes:

1. Page 3, Item IV.a., first paragraph, second sentence, which reads: **"The generator site access program was established to . . . shipping waste to Envirocare were comply with the transportation requirements. "** Change to read: **"The generator site access program was established to . . . shipping waste to Envirocare would comply . . . "**
2. Page 7, Item VI.b., 4.a., #2., sentence which reads: **"Non-Agreement State concerns about the non, but radiological hazards could potentially . . . "** Change to read: **". . . non-radiologic hazards . . . "**
3. Page 8, Item VI.b., 5.e., sentence which reads: **"Since the office was formed, there are comprehensive programs are in place to deal with . . . "** Change to read: **"Since the office was formed, comprehensive programs are in place to deal with . . . "**

Stephen Nelson proposed the following changes to the minutes:

4. Page 6, Item VI.b., 2.a. #6., sentence which reads: "Since 1982, there has been a strong trend toward ISL facilities . . . " Change to read: " . . . In-Situ Leach (ISL) facilities . . . "
5. Page 8, VII.a., first paragraph, number (2), which reads: " . . . process (2) information relating to the required number of signatures required . . . " Change to read: " . . . Information relating to the number of signatures required . . . "

Tom Chism, proposed the following change to the minutes:

6. Page 9., VIII., Public Comment by Jason Groenewold, FAIR, second paragraph, first sentence which reads: "He mentioned in one of the previous items was that DOE was looking . . . " Change to read, "He mentioned . . . previous items that DOE was . . . "

Greg Oman, made a motion to approve the minutes of July 12, 2002, as amended, motion was seconded by Tom Chism.

CARRIED AND APPROVED UNANIMOUSLY

- b. Approval of Minutes of Teleconference Board Meeting held on July 22, 2002

Stephen Nelson asked the Board if there were any corrections of the minutes from the teleconference Board meeting held July 22, 2002. No corrections were identified.

Karen Langley, made a motion to approve the minutes of July 22, 2002, motion was seconded by Greg Oman.

CARRIED AND APPROVED UNANIMOUSLY

II. RULES (Board action item)

- a. Changes to re-proposed rules R313-70-7, and R313-17-2 relating to uranium mills and uranium mill tailings disposal facility requirements - final approval

Bill Sinclair reported that a public comment opened July 1, 2002, and closed July 31, 2002 regarding re-proposed changes to the Utah Radiation Control Rules. The changes involved R313-17-2(1)(a), "Public Notice and Public Comment Period," and R313-70-7(2)(b)(c)(d)(e), "License Categories and Types of Fees for Radioactive Materials Licenses." The rules were re-proposed as a result of public comment which required substantive changes. A public notice of the comment period was published in the Salt Lake Tribune, The Deseret News, the Moab Times Independent, and the Blue Mountain Panorama (Blanding). No written comments were received during the 30-day period. Bill Sinclair then recommended that the Board give final approval to changes to proposed rules R313-17-2(1)(a) and R313-70-7(2)(b)(c)(d)(e) and set the effective date as September 10, 2002.

Karen Langley, made a motion to give final approval to the proposed rules R313-17-2(1)(a) and R313-70-7(2)(b)(c)(d)(e) and set the effective date as September 10, 2002, seconded by Dianne Nielson.

CARRIED AND APPROVED UNANIMOUSLY

III. RADIOACTIVE MATERIALS LICENSING/INSPECTION

- a. **Briefing of the Commission by the Organization of Agreement States (OAS) and the Conference of Radiation Control Program Directors (CRCPD) (Board information item)**

Bill Sinclair indicated that within the Board's briefing packet was an outline of a presentation given recently to the Commissioners of the U.S. Nuclear Regulatory Commission (NRC) by two state organizations, the Organization of Agreement States (OAS) and the Conference of Radiation Control Program Directors (CRCPD). Bill indicated that his role in the briefing was as the Chair of OAS. The two-hour briefing covered a variety of topics as indicated on the outline. Significant interest by the Commissioners was shown regarding the issues of lost sources, clearance, compatibility, security (although discussion was limited), and the future working relationship with states. It is recognized that in the future, States and NRC must develop a new working relationship in the national materials program area, including shared responsibilities and resources to solve national problems. Bill and the OAS Executive Board also were given the opportunity to meet with Chairman Meserve the day following the briefing to discuss joint radioactive material user security issues in more detail and in private.

IV. X-RAY REGISTRATION/INSPECTION

- a. **Formation of Subcommittee to formulate possible actions by the Board regarding full-body CT scans on asymptomatic patients**

Bill Sinclair reported that individuals who desired to provide whole-body CT screening to healthy individuals had approached the Division on several occasions. The Division has no policy regarding this matter, and the present Radiation Control Rules are not clear as to whether or not a healing arts screening program is required for such facilities or who is authorized to administer such procedures. In the July 12, 2002 Board packet, information was provided from several federal and state agencies and national health care organizations that have taken positions in regarding whole-body CT scans.

He pointed out that at the July 22, 2002, teleconference Board meeting, it was recommended that the Executive Secretary submit a request to Board members soliciting participation on a subcommittee to study this issue and make recommendations to the full Board at a future time in concert with Division staff. Shortly after the teleconference, a request was forwarded to all Board

members by electronic mail, and the Executive Secretary received several positive responses.

He recommended that the Board establish a subcommittee comprised of Karen Langley, Gary Edwards, Rod Julander, Dr. John Thomson, and Dr. Greg Oman to evaluate the technical and policy issues in concert with Division staff. Craig Jones will facilitate the subcommittee and recommendations will be made to the Board by the December 6, 2002, Board Meeting.

Discussion by Board Members:

Stephen Nelson stated that the safety of the scanner appeared to be the item of concern for the Board. He was less certain regarding the appropriateness of medical practices involved. Bill Sinclair responded that the issue raised by Stephen Nelson was the kind of discussion that he wanted the subcommittee to evaluate and advise the Board concerning appropriate actions to take, if any.

Rod Julander made a motion to established the subcommittee with the five Board Members that had volunteered to serve as mentioned by the Executive Secretary. The motion was seconded by Karen Langley.

CARRIED AND APPROVED UNANIMOUSLY

V. RADIOACTIVE WASTE DISPOSAL

- a. Update on Generator Site Access Permit enforcement policy - (Board information item)

Jule Fausto reported that the Generator Site Access Enforcement Policy was developed to establish a standardized enforcement guidance program. The policy is designed to allow for inspector and agency discretion based on extenuating circumstances, systemic trends, degree of harm to the public health and/or safety, and generator diligence. Generators of waste who access Envirocare were asked for comments on the specific details in the policy. The Division issued a draft Generator Site Access Permit Enforcement Policy for public comment. The comment period closed on August 15, 2002. Each generator with a current site access permit was notified by mail of the opportunity to comment on the draft policy.

The Division received 17 response letters containing approximately 100 individual comments. The Division staff have been reviewing, compiling, and preparing responses for the comments and this activity should be completed within the next two weeks. Comments were received from U.S. Department of Energy owned facilities and their contractors, university-operated laboratories, engineering and environmental laboratories, utility companies, the Nuclear Energy Institute, and Envirocare. The comments generally support the intent of the DRC draft enforcement policy; however, a number of comments suggested various revisions to the June 26, 2002, draft enforcement policy. Some comments expressed concerns about the policy rationale and intent.

A question regarding the goal and intent of a regulatory agency to alert a generator of a noncompliant issue once it has arrived at the facility was raised. The goal of DRC staff to notify the generators of noncompliant or unsafe issues is primarily to inform the responsible parties, offer advice or direction regarding state and federal requirements, and to help assure future compliance in achieving the safe transportation and handling of radioactive waste to its destination. Several comments suggested clarifying the point system by incorporating a corresponding schedule of civil penalties with the point system, and further defining rationale for penalties.

Discussion by Board Members

Bill Sinclair stated that this policy was brought before the Board at the July 12, 2002, Board Meeting. The intent would be that once the comments are evaluated and the final decisions are made on the policy, the Division would bring it back before the Board and obtain the Board's approval of the policy.

Stephen Nelson asked if there was anything systematic about the nature of the comments in those particular areas.

Jule responded that some of the references in regards to the 49 CFR (Federal Department of Transportation rules) had been revised and needed more explanation such as an understanding of what load bracing is. There were questions concerning the point system and how it related to the current Radiation Control Rules (enforcement) and Severity level determinations.

- b. Notices of Violation of August 23, 2002, and September 3, 2002, issued to Envirocare of Utah, Inc. (Board information item)

Bill Sinclair stated that there were two Notices of Violation (NOV) that had recently been issued to Envirocare. The August 23, 2002, NOV was included in the Board packet, as well as a response from Envirocare asking for a reconsideration of the action and reserving the right to a hearing. Bill pointed out that another NOV of September 3, 2002, was provided in the Board supplemental packet, as well as a response from Envirocare. Since Envirocare had also reserved the right to a hearing on these matters, details involving the NOVs were not discussed at the Board meeting.

Discussion by Board Members:

Rod Julander asked about Envirocare's request in the response to the August 23, 2002, NOV to reconsider issuance of the NOV. Bill indicated that in the reconsideration request there is a reference to an existing Radiation Control Rule that determines whether or not a self-reported violation is subject to further action. Envirocare is concerned with the use of that rule by the

Executive Secretary. Bill indicated that the Division will respond to the reconsideration request and Board members will be provided with a copy of the response.

Stephen Nelson indicated that members of the public had signed up to address the Board on this issue. He then asked Fred Nelson the appropriateness of this request. Fred Nelson responded that because the hearing request is pending, it is not an appropriate time to take comments on this issue until it has gone through the entire administrative process. The Board should not address the specifics of the NOV. The process will happen in due course. He indicated that it is appropriate for the Board to ask those who wish to make public comment on this issue what they would be addressing, but it is not appropriate for the Board to hear a discussion with respect to the NOV that potentially could be adjudicated later.

Public Comments:

Jim Holtkamp, legal counsel for Envirocare, indicated Envirocare would object to any comments on NOVs pending appeal before the Board. He stated that until someone wants to become a party and moves to intervene and goes through the process that the Board has established, it is inappropriate for comments to be made regarding any NOVs pending appeal.

Stephen Nelson indicated that he wished to make it clear then that from his position as Chairman, he is always interested in hearing from the public. He also indicated that he did not want to get the Board into a procedural bind if the Board has to hear an appeal and the appeal may be compromised.

Ann Sward Hansen, representing Citizens Against Radioactive Waste, stated that she wanted the record to show that the public was denied an opportunity to speak on the agenda item about the Envirocare NOVs of August 23, 2002, and September 3, 2002. She indicated that her group would be looking for the opportunity to speak by a direct hearing request.

Cindy King, representing the Utah Chapter of the Sierra Club, expressed her concern that it was not clear that the NOVs were a possible adjudication item, and it was her understanding that items on the agenda could be addressed or commented on by the public. She indicated that the Board was denying the public due process by not allowing public comment on these NOVs.

Rod Julander asked Fred Nelson if the reason Ann and Cindy were not allowed to speak on the NOVs is because there may be an appeal that the Board may have to consider.

Fred Nelson responded that due process requires that the decision-maker treat an issue and hear an issue fairly. Fred indicated that in such a process there has to have been adequate notice, parties have to be present, and everyone has been given the opportunity to be prepared to present information. He stated that the Board is not at that point in the process with the NOVs. All that has happened

is there has been an NOV issued, a hearing request has been made, and the parties (Envirocare and the Executive Secretary) will try to resolve the issues. If the parties cannot resolve the issues, the Board will hear the appeal of any final Executive Secretary decision. He restated again that, at this point in time, it is inappropriate for either Envirocare or the Executive Secretary, or any other interested parties, to comment to the Board because all parties have not been given a fair notice of what is to go forward to a hearing, if a hearing occurs. If the public disagrees with what is resolved, they can ask the Board to reconsider the matter.

- c. **Update on Air Force Request for Agency Action - presentation by Laura Lockhart (Board information item)**

Laura Lockhart, representative of the Executive Secretary from the Attorney General's Office, updated the Board regarding the U.S. Air Force Request for Agency Action regarding the Envirocare B and C waste license. The parties, Department of Defense and the Rocky Mountain Compact, have been negotiating a settlement on several issues. In the best case, it is hoped by the time of the next Board meeting, that there will be a stipulation for dismissal. Laura reiterated that, at this time, there was no action item for the Board to consider.

- d. **Motion for Reconsideration by Families Against Incinerator Risk (FAIR) - presentation by Fred Nelson (Board action item)**

Fred reported that the Board Members had been given three documents in the Board packet to review: (1) a motion to reconsider presented by FAIR, (2) the opposition to the motion that was submitted by Envirocare, and (3) the Executive Secretary's response to FAIR's motion to reconsider. Fred said that he would explain to the Board how this fits into the process since the Board had never dealt with this type of motion before today.

He stated that previously, FAIR had presented a number of issues in the appeal of the containerized Class A, B, and C low-level radioactive waste license issued by the

Executive Secretary. The Board considered nine issues presented in a Motion for Summary Judgment by Envirocare. As a result of that proceeding, the Board heard arguments from the parties, and passed judgment on the issues within the Motion for Summary Judgment. As a result of that Board action, he had prepared an order that the Board approved at a previous meeting, which was signed by the Chairman and was sent out to the parties. The order summarized the actions resulting from the Motion for Summary Judgment. Under the State of Utah Administrative Procedures Act, a party can request reconsideration of an action. In this case, FAIR asked the Board to reconsider the decision regarding the Motion for Summary Judgement.

He continued by stating that if the Board moves to reconsider the Motion for Summary Judgment, the Board would have to decide what specific issues to open up that have already been heard and ruled upon by the Board. If the

Board determines that they do not want to reconsider the Motion, by taking no action, the Motion for Reconsideration was deemed denied. The question then, that the Board needs to consider, is based on the review of the documents in the packet, and if the Board would like to reconsider previous actions.

Discussion by Board Members:

Dianne Nielson asked if the Board has to take an action to actually deny the motion for reconsideration. Fred Nelson responded that the Administrative Procedures Act states that if the Board does not act within 20 days, the Motion for Reconsideration is deemed denied. It is a question of the Board evaluating the documents and deciding whether the Board wants to affirmatively go forward and reconsider the Motion for Summary Judgement. Stephen Nelson responded by stating that a failure to receive a motion to reconsider the issue basically denies the request. Fred Nelson responded in the affirmative.

Stephen Nelson then asked Fred Nelson if it was appropriate to hear from the parties. Fred indicated it was appropriate.

Comments from the Parties:

Jason Groenewold, FAIR:

Jason indicated that he would like the Board to view the Motion for Reconsideration as a way to provide a record. If the issue is further appealed, it would help to expedite the process for the State and the appellate court. During the process for Summary Judgement, certain issues were ruled out of the appeal. Since this occurred, FAIR was not able to do discovery or provide witness testimony on the issues that the Board dismissed. Reconsideration helps to allow that process of discovery and establish a more thorough record.

He mentioned that one of the challenges in filing the reconsideration request was that because of the July 4, 2002 weekend, the normal Board Meeting was moved and it was not taken up or put on as action item in July. The August meeting was then canceled, so there is a question as to the best way for the Board to make decisions on these kinds of issues. FAIR mailed the reconsideration request on June 28, 2002, in an attempt to meet the 20-day deadline. FAIR wanted to present the reconsideration request before the Board, to provide the opportunity to look at the issues that were presented in the original appeal that was filed. He stated, again, that the purpose of the reconsideration request was to help establish a more thorough record for anyone else who might look at this issue in the future.

Patrick Malone, Counsel for Envirocare of Utah, Inc.

Patrick Malone was also provided an opportunity to respond. He indicated that there are several reasons why FAIR's motion should be denied. First, FAIR's argument that there was no opportunity to create an administrative record is false. FAIR did have that opportunity. The real issue is whether FAIR took advantage of that opportunity. He indicated that it was true that FAIR did not necessarily have an opportunity to present live testimony to members of the

Board. The proper way to do that was to prepare an affidavit and to attach the affidavit to the motions and the responses, which were made to the Board. The Board had ample opportunity to review the issues raised by FAIR.

He continued by stating, as Jason (Groenewold) noted to one of Envirocare's objections, the motion for reconsideration was filed untimely and it also failed to satisfy other procedural requirements under the Administrative Procedures Act. FAIR's motion for reconsideration did not raise any new facts for the Board to reconsider. It merely rehashed things that have already been considered by the Board. It also raises new legal arguments, which Envirocare believes are inappropriate to be brought before the Board at this late point, and which should have been raised earlier in the process. Envirocare believes there was no merit to the issues raised upon review of the opposition brief filed and from the many pleadings which have been filed in this process previously.

He concluded by pointing out that FAIR asked the Board to reset the clock. This proceeding has been going on for almost a year now, and FAIR is asking the Board to effectively start over again. Envirocare believes that it is inappropriate. Envirocare encouraged the Board to take no action on the reconsideration request, thus denying the motion.

Discussion by Board Members

Rod Julander asked what the damage would be to Envirocare or anybody else if the clock was reset.

Patrick Malone, Counsel for Envirocare, responded that the most obvious damage is time. Envirocare has made a substantial investment of time and energy and resources in pursuing this appeal, and pursuing the license generally. Going through this process, yet again, would prejudice Envirocare by requiring additional expenditures of time, money, and effort.

Rod Julander asked Patrick Malone to respond to FAIR's suggestion that this would be valuable to clarify the record.

Patrick Malone responded that FAIR had raised a total of nine (9) issues, eight of which were dismissed during the Board's consideration of the Motion for Summary Judgment. He indicated that Summary Judgment is a well-established legal process and an appropriate way for establishing the record for appeal.

Laura Lockhart, Counsel for the Executive Secretary, indicated that where there were no facts relevant to the case, there was no need to provide another opportunity to develop these facts. She also indicated she respectfully disagreed with Envirocare as to the time limit for reconsideration. The clock for reconsideration begins to tick after the Board has made a final decision of the entire case.

Rod Julander asked about the time frame regarding the reconsideration request.

Laura Lockhart stated that her point was that this is a multi-part hearing, and the end of all parts has not been reached. Therefore, the time for reconsideration has not begun. This does not address the issue of the wisdom of

granting reconsideration.

Stephen Nelson asked if there was a motion from the Board. He pointed out that the Board would need to make a motion if the reconsideration request was to be approved. He noted for the record that there was no motion.

NO MOTION, REQUEST FOR RECONSIDERATION DEEMED DENIED

- e. **Scheduling of hearing date for FAIR's request for Agency Action in the matter of the license to Envirocare to accept and dispose of Containerized Class A, B, C and low-level radioactive waste (License No. UT2300249-BC) - Laura Lockhart/Fred Nelson (Board action item)**

Laura Lockhart noted that the scheduling order, that the Board approved, stated that the Envirocare hearing would be held on or after October 21, 2002. She indicated that it may be appropriate to poll the parties to determine a time for the hearing.

After discussion between Board members and the parties, Rod Julander made a motion that the hearing be scheduled during a two-day block of October 31, 2002, and November 1, 2002. At the October 4, 2002, Board meeting, parties were to provide the Board with a time frame for presentations since pre-filed testimony is due October 1, 2002. The motion was seconded by Greg Oman.

CARRIED AND APPROVED UNANIMOUSLY

VI. URANIUM MILL TAILINGS UPDATE (Board information items)

- a. **Moab Millsite update**

Loren Morton made the following presentation to the Board which is summarized in the following table:

Date	Activity/Description
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July
12,
2002

Moab Millsite Groundwater Subcommittee Meeting: Moab, Utah

The Subcommittee meeting included both a field visit and an indoor meeting, which are summarized below:

Field Visit – during the field visit the Subcommittee examined 3 sites, as follows:

Bedrock Well No. 434 – including examination of core samples where Colorado River gravels were found at a depth of 52 feet below ground surface (ft bgs). Bedrock was found at 60 ft bgs.

River Intake Structure – for the Freshwater Application Project has been installed just upstream of the mouth of Moab Wash. Piping and pumps to be added later.

Backwater Habitat Areas – found to be dry and above river level. First year growth on new tamarisk trees had profusely established themselves in these areas.

Subcommittee Meeting – the Subcommittee met in the Grand County Council chambers on the afternoon of July 12. Discussions focused on several DOE reports issued in June, 2002, as summarized below:

NAS Report – DOE-GJO summarized several action items needed and information gaps identified by NAS. Later, DOE-GJO forwarded a proposal and schedule to resolve these needs to DOE-HQ on July 22, 2002. Former DOE deadline of November, 8, 2002 will be postponed.

6/02 DOE Groundwater and Tailings Pile Characterization Workplan – included a 4 phase work effort, as follows:

Phase 1: 3 Piezometers Nests Installed Near River – DOE installed 3 piezometer nests of 3 Vibrating Wire Transducers (VWT) each (20, 60, 100 ft bgs) near the river at 2 locations South of the pile (Nos. 421-423 and 424-426) and 1 location East of the Pile (No. 427-429), see Figure 2, attached.

Phase 2: 3 Piezometer Nests Installed in Pile – DOE installed 3 piezometer nests of 2 VWT each (20 and 40 ft bgs) into the tailings pile (Nos. 415 / 416, 417 / 418, and 419 / 420), see Figure 2 attached. Preliminary data suggests the wick drains are working (upward flow of leachate inside the pile).

Phase 3: Subsurface Electrical Conductivity Measurements – 11 borings were planned at the site along 3 transects to measure subsurface electrical conductance in and attempt to determine depth to the freshwater / brine interface in the subsurface, see Figure 2 attached below. Since the July 12 meeting, DOE was successful in installing 10 of these borings.

Phase 4: 16 Bedrock Borings and Paired Bedrock / Alluvial Wells – 16 new monitoring wells were planned at the site, including:

3 Alluvial Wells ON Pile - to be installed thru the tailings pile to locate depth to bedrock; then completed as shallow alluvial aquifer monitoring wells (Nos. 437 thru 439), see Figure 1 attached.

3 Alluvial Wells OFF Pile – to be installed across the West margin of the tailings (Nos. 440 thru 442).

3 Bedrock / Alluvial Well Pairs (6 Wells) - were to be installed Northwest and East of the tailings pile (Nos. 431 / 443 and 436 / 445), and 1 in the mill site area (Nos. 435 / 444)

4 Bedrock Wells North of Pile – including 1 in Moab Wash (No. 430), 2 North and South of Highway 191 (Nos. 432 and 433), and 1 Northeast of the site (No. 434).

Progress Reports – during the July 12 meeting, the Subcommittee asked DOE to provide progress reports during the characterization effort to document the hydrogeologic data gathered by these new wells and borings. DOE agreed to provide this information as it is available. First progress report now expected in late September.

Characterization Update – since the July 12 meeting DOE has largely completed all 4 phases of the characterization and is in the process of data reduction and evaluation. Of the 16 wells planned, only 14 were installed (Nos. 441 and 445 were omitted). Preliminary DOE findings indicate:

Bedrock was NOT found below the tailings pile although the borings were advanced over 300 feet (> 200 ft bgs).

Bedrock was also NOT found under a large part of the mill site area, although a boring was advanced to over 200 ft bgs (No. 436).

Colorado river gravels were found in all borings installed with the exception of Nos. 430 (in Moab Wash) and 442 (SW edge of pile).

Wood fragments were found in 1 boring (No. 435) at a depth of 116 feet. These were sent to a contract laboratory for Carbon-14 analysis.

6/02 DOE Groundwater Model Sensitivity Analysis Report – DOE staff concluded that neither the existing NRC or the Shepard Miller Inc. (SMI) groundwater flow and transport models were representative of site conditions; largely due to:

Lack of Subsurface Hydrogeologic Data - to justify model input assumptions and boundary conditions,

Lack of Ability to Calibrate the Models – to historic groundwater head data., and

Lack of Ability to Simulate Dynamic Density Driven Flow – of fresh groundwater or underlying brine in the subsurface at the facility.

NOTE: neither the NRC or SMI models predicted the UMTRCA uranium groundwater standard (0.044 mg/l) would be met at nearby monitoring wells any of the 3 alternatives simulated, i.e., No-Action, Cap-in-Place, or Source Removal Alternatives.

Subcommittee Comments – the Subcommittee encouraged DOE to

Complete its characterization efforts and then construct a new model based on verifiable site data.

Carefully measure and evaluate both groundwater recharge to the alluvial aquifer from underlying bedrock formations and groundwater discharge to the atmosphere via tamarisk evapotranspiration, and

Evaluate the potential for groundwater contaminant uptake by tamarisk evapotranspiration.

6/02 DOE River Migration Report – DOE observed:

The location and elevation of nearby Colorado River terrace gravels, and concluded that the river could only migrate South away from the tailings pile, and

Historic aerial photographs since 1944 suggest that the river channel near the pile has deepened.

Subcommittee Comments – several comments were offered including:

Additional data needs to be collected and all explanations considered before conclusions can be reached about river migration directions at the site. Subsurface geologic data needs include: depth to bedrock, vertical and horizontal distribution of paleo-river gravels, and carbon-14 age dating of river gravel deposits.

Deepening of the river's channel suggests that higher peak flows and erosive forces are possible on the North river bank, over and above those previously considered by NRC.

Characterization Update – the wide distribution of Colorado River gravels found in recent DOE borings suggests that the river has freely migrated across the site during the course of geologic time. Hopefully, carbon-14 age dating of the wood fragment discovered in boring No. 435 will aid in better dating the gravel deposits at the site.

6/02 DOE Groundwater Brine Zones Characterization Report – DOE conducted a multi-well pump test of existing monitoring wells installed by SMI near the Southeast corner of the tailings pile (PW-01 well nest). At the same time head and groundwater quality observations were made at 2 other well nests at the site. The objective of the pump test was to evaluate the potential for upconing of the deep brine, that could interfere with the planned groundwater pump and treat remediation project. From the test DOE concluded:

That brine upconing did occur during the pump test, but attributed it to the long well screen interval in pumping well PW-01 that allowed both the shallow Silty Sand and the underlying Gravelly Sand layers to be stressed during the test, and

A new multi-well nest must be installed at the Southeast margin of the mill site area and the pump test repeated in order to accurately determine if deep brine upconing could occur. In this second pump test DOE will only stress the shallow Silty Sand layer that will be intercepted by the proposed groundwater pump and treat system.

Tailings contamination in the deep brine aquifer will NOT be remediated by DOE, but instead will be allowed to travel undisturbed to the river where it will undergo dilution with the other natural salts discharged.

Subcommittee Comments – several comments were offered, including:

Need to Determine Freshwater Equivalent Head – DOE needs to account for groundwater density differences in all of its groundwater head measurements at the site.^{v)} **Additional**

Investigation at Mill Site Cluster PW-03 – baseline groundwater head and geochemistry data from the mill site well nest PW-03 indicates that the freshwater / brine interface was NOT found at this location. Instead, this data suggests that tailings contamination much deeper here than at other site locations.

Additional Groundwater Characterization - needs to be completed in order to carefully identify local groundwater flow directions, both in the horizontal and vertical domains. Only after the site is well characterized can a groundwater pump and treat system be designed.

6/02 DOE Geology and Groundwater Resources Report for Klondike Flats – DOE concludes that the Klondike Flats area is:

Petitioners' hearing requests: namely, that because of the high lead content of the Molycorp material, the activity involved poses a threat.

Comment by members of the Public

Ann Sward Hansen asked Loren Morton about the status of sampling the drinking water at the White Mesa Ute community. Loren indicated that a cooperative effort had been launched between the environmental arm of the Tribe and the Department to collect annual samples of the drinking water. All samples to date had shown no contamination of the drinking water with any parameters that could be attributed to White Mesa Mill activities.

OTHER DEPARTMENT ISSUES (Board information item)

a. Status of the citizen initiative - Radioactive Waste Restrictions Act

Bill Sinclair relayed to Board members that on August 26, 2002, the Utah Supreme Court ruled on an appeal by proponents of the Radioactive Waste Restrictions Act (citizen's initiative) that Utah's multi-county signature requirement for placing an initiative on the ballot was unconstitutional. As a result of the Court ruling, the Lieutenant Governor was ordered to accept the petition results and place the initiative on the 2002 general election ballot. A copy of the Court's decision (39 pages) is provided in the supplemental packet.

As a result of this Court action, an impartial analysis and fiscal analysis of the initiative has been prepared which has been made available for interested voters. Copies of these analyses are provided in the supplemental packet. Since this initiative directly impacts the Board, he indicated it may be appropriate for Board members to determine what, if any, action the Board may want to take independently.

Discussion by Board members

It was determined that the Board would like to hear information from both proponents and opponents of the citizen's initiative. There was lengthy discussion regarding the process for accomplishing a healthy debate on the issue.

Rod Julander made a motion that the Executive Secretary extend an invitation to both proponents and opponents of the Initiative to attend the Board meeting of October 4, 2002. Each party will be limited to a 45-minute presentation, which includes time for Board member questions. Both proponents and opponents are encouraged to represent their various interests and alliances. The meeting is not intended to be an open public debate, and additional public comment will not accepted. The purpose of the invitation is an opportunity to educate the Board on the initiative. The Executive Secretary will also prepare a public notice stating the meeting process that will be published prior to the

Board meeting. The meeting on October 4, 2002 will begin at 1:00 p.m. to allow adequate time for the parties. Regular Board business will occur first with a time certain of 1:30 p.m. for the initiative discussion. The motion was seconded by Dianne Nielson.

CARRIED AND APPROVED UNANIMOUSLY

VIII. PUBLIC COMMENT

Cindy King, Utah Chapter, Sierra Club, commented that all decisions made by the Board need public participation and a transparent decision-making process. She reiterated again her disappointment of not being able to participate by making public comment during the Envirocare NOV discussion because it potentially would be a hearing issue.

Greg Copeland, Greenfield Logistics raised the issue of the public being provided a copy of the briefing packet that Board members receive prior to the meeting.

Bill Sinclair stated that if someone requests the Board packet prior to the meeting, they can have it, but will have to pay for the copying. This is being done at almost every meeting at this particular time. Dianne Nielson suggested that the Division evaluate this issue and report back regarding some alternatives or suggestions on making the Board packet available to the public. Other Board members provided suggestions, as well, regarding this issue.

Bill indicated that he would research this issue and report back to the Board at the October 4, 2002 meeting.

IX. OTHER ISSUES

- a. Next Board Meeting - October 4, 2002, DEQ Bldg #2, Conference Room 101, 168 N 1950 W, Salt Lake City, Utah, 1:00 - 5:00 p.m.,**

The Board meeting adjourned at 4:45 p.m.